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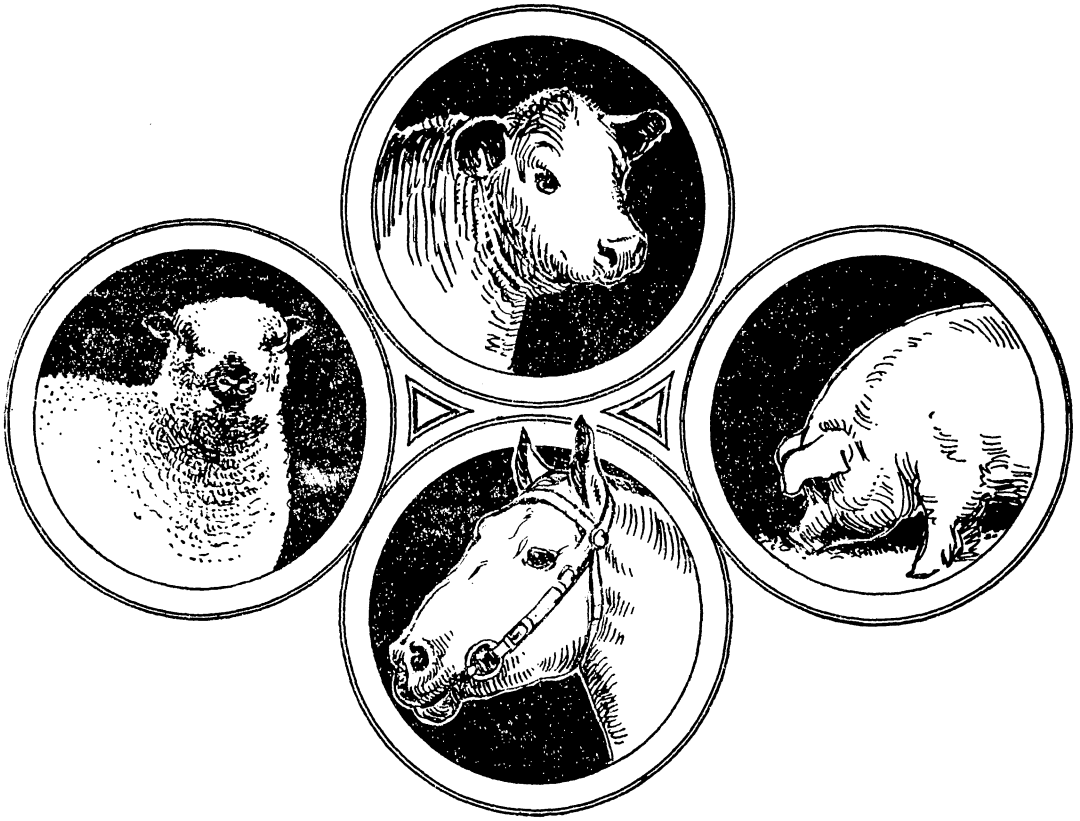
The EXTENSION ANIMAL HUSBANDMAN

U. S. Department of Agriculture



UNITED STATES DEPARTMENT
OF AGRICULTURE
WASHINGTON,
D.C.

Serial No. 2 June 1926

A TRIBUTE TO LIVESTOCK

The earliest orthodox peep at the beginnings of the livestock industry and its problems comes to us from the second chapter of the Bible, in the Book of Genesis - and, in so far as burned bricks, sculptured cliffs and columns, and the written record of the world have whispered the secrets of the yesterdays of life, the problems of livestock have been wrapped and twined around every year of every era of human civilization.

From the days of the Patriarchs' cattle on a thousand hills, from the world conqueror's columns of camels of a dozen deserts, from the multitude of elephants of the proudest Pharaohic dynasty's golden age, from the palatial peacock gardens of the most powerful of ancient queens, from Arabia's incomparable herds of imperial horses, unto the scenes in the landed sheep fastnesses of the world's greatest shepherd since Father Abraham from the Adamic days unto this artful hour - livestock and prosperity have waited or walked (as it were) hand-in-hand and side by side, sometimes through the lean years of hunger, and again, through the Nilean-like valley of plenty, because the problems of livestock have been, now are, and ever shall be, forever and ever, inseparably linked with all of the critical questions of city and country life.

--- Jewell Mayes.

UNITED STATES DEPARTMENT OF AGRICULTURE

Washington, D. C.

THE EXTENSION ANIMAL HUSBANDMAN

Issued by the Bureau of Animal Industry and the
Office of Cooperative Extension Work Cooperating.

Serial Number 2-- --June 1926

Editorial

This, the second number of our publication, consists largely of material gleaned from the 1925 annual reports of the State specialists. It is hoped that the individual members of the group will find something of interest and value to them in such information.

When reports are being prepared, if each worker would keep in mind what he would like to know about the other fellow's activities and be governed accordingly in his own narration, it would result in improving the usefulness of all reports.

The first article in this issue, by Mr. E. W. Sheets, suggests the prime importance, in all our work, of keeping in mind the end product, whether it be meat, power, wool, or what not. Such procedure will tend to broaden the appeal and otherwise strengthen our entire program.

In response to the request for contributions suitable for use in these pages, which was carried in the first issue, E. T. Robbins of Illinois has submitted a good article which appears in this number. Others have promised stories for future use.

Again, it is desired to stress the fact that the outcome of this attempt to provide a mouthpiece through which animal husbandry extension workers may converse with each other is principally in the hands of those who compose this group. The spirit of give and take must prevail, if this medium is to be successful in serving the purpose for which it is intended. Suggestions and other comments tending to make it more fully meet the needs of the situation are respectfully solicited.

C. D. Lowe.

THE ANIMAL HUSBANDMAN'S GOAL

By E. W. Sheets, Chief, Animal Husbandry Division,
United States Department of Agriculture.

It has often been proved that he goes farthest who has his goal most clearly in mind. "A tedious axiom with which to begin a contribution to the EXTENSION ANIMAL HUSBANDMAN!" you may exclaim, but it has a special significance with reference to live stock research and extension work at this time.

We are changing our goal in animal husbandry research. Or, a more accurate way to state it would be, we are changing our conception of our goal. We have, it is true, always been interested in better methods of breeding and feeding horses primarily to produce a horse that could do more or better work. We have striven to produce better beef animals for the sake of better beef. And we have had wool and mutton in mind in sheep production studies, pork in mind in swine studies, and poultry meat and eggs in view in our research work with chickens.

But in many cases we have lost sight of our final goal right in the midst of our efforts, or through some form of necessity have been forced to turn aside from it. In the first instance, either our admiration for the stock we have produced or our concentration upon rations, pedigrees, weights and measurements, or a combination of these causes has been responsible for the sidetracking. A much more responsible cause, however, has been the lack of equipment facilities for undertaking and carrying to completion the solution of the varied complex problems involved -- the length of time and expense involved in conducting the work being the principle limiting factors.

I seek to cast no doubts on the worth or practicability of the research work that has gone before. It has been timely, important, and well done. Its findings and the extension of the results have left indelible marks upon the quality of our livestock and set a high mark in the field of accomplishment for those who have performed the work. What I am doing, on the other hand, is to record a change which those same research men and those same teachers and extension workers are making in their methods of procedure and in their ultimate aims. This does not mean that our present lines of work will be discontinued, but that we will plan and conduct our projects to meet our present-day needs.

It is no longer merely a matter of how much, for example, a horse will weigh, how many hands he is high, and whether he is sound. "What can he do?" has come at last to be the rightful measure of a horse's worth. Our pulling demonstrations, with machines for recording a horse's ability in harness, have given us a slightly different slant on horseflesh, and have given us a logical test for all our previous ideas.

The same is true in the field of meat-animal production. It is neither how many pounds of live steer nor how much dressed beef we have after a certain feeding period on a particular combination of feeds, which should form the final test.

There are other considerations such as relative weights of the high-priced and low-priced cuts, the quantity, flavor, and distribution of the fat, the color and texture of the lean, and the size of the steaks and roasts, which are of far more importance to the consumer, retailer, wholesaler, and producer, one and all.

In like manner, it is not merely total pounds of sheared wool which should be uppermost in the sheep producer's mind. He wishes to know how many pounds of clean wool will be left after the grease and dirt have been removed, and of what quality it will be. If his best wool-producing ewes can raise lambs with broad loins and heavy legs of mutton such as we used to expect only from the so-called mutton breeds; then the sheepman is indeed in a fair way to succeed.

if the swine producer is so situated that he has an abundance of cheap feeds which will by themselves produce a less desirable carcass, it is dollars in that man's pockets to find some combination of feeds for him that will counteract the difficulty.

It is somewhat like carrying coals to Newcastle to mention these more or less recent developements to extension animal husbandmen. They have been well abreast of the change. Horse pulling demonstrations, meat demonstrations, and other activities have been sponsored by them in numerous instances. Some of these have been a combination of research and teaching. A demonstration has been known oftentimes to change the viewpoint of the demonstrator as well as of his audience.

At any rate, the good work has been begun, and there remains much to do. Our cooperative study of "Factors which Influence the Quality and Palatability of Meats," already embraces practically two-thirds of the States and othere are preparing to join.

The extension man need not wait for volumes of detailed results. There is work for him at this time. Much is known already about the end-product of our efforts which might well be made more common knowledge. Take the matter of quality in beef for example. No one knows what causes dark-cutting beef. And that a steak from a corn-fed steer is more palatable than one from a grass-fat heifer, in equal flesh, has never been proved. Yet, most of us do know how to select the choice from the common, on the butcher's block. The vast majority of consumers, however, do not. I repeat, there is extension and teaching work to be done.

Three months ago the Department published a poster showing in natural colors a choice and a common round of beef. This poster was given its modest share of publicity, and not a day has passed since the announcement of it that has not brought from half a dozen to half a hundred requests for copies of it. People of every walk of life, in every State of the Union, from six provinces of Canada, five European countries, one place in Africa and one in Australia have sent for copies of it. A large number have acknowledged receipt of the poster and praised the simple lesson it teaches.

The eagerness with which this poster has been received has shown the presence of an enormous interest in the end-product of our livestock industry. Both producers and consumers are awaiting further developements. The scientific investigator, the teacher, and the extension man must work together to accomplish the results which are being expected. Extension men work closer with the producers than either of the other two groups. They are welcoming the opportunity to talk to the producer in terms of the demands of the consumer. For they may expect the far-sighted producers to see that the problems of the two groups are interrelated. Our success will be largely determined by our ability to plan our work and continue to pull together.

NEW "MOVIES"

"The Cow Business" (range cattle management, two reels,) and "The Horse and Man" (historical, one reel) are titles of two new motion pictures. Applications for them should be made to the Office of Motion Pictures, Extension Service, United States Depatrment of Agriculture, Washington, D. C.

P R O G R E S S

Progress demands very largely on the encouragement of variety. Whatever tends to standarize the community, to establish fixed and rigid modes of thought, tends to fossilize society. If we all believed the same things and thought the same thoughts and applied the same valuation to all occurences about us, we should reach a state of equilibrum closely akin to an intellectual paralysis. It is the ferment of ideas, the clash of disagreeing judgments, the privilege of the individual to develope his own thoughts and shape his own character that makes progress possible.

--Calvin Coolidge.

THE KNIGHT OF THE DAY

Specialist in Swine Production am I,
The finest position under the sky;
Working by day and working by night
On a job that is barred to the Israelite.

Hurrah for the Berkshire, the York, and the Tam--
So long as he's pork, whether shoulder or ham.
It's weight we are after, and not pedigree;
Although we admit the scrub is N. G.

May the sun shine by day; boar-ealis by night,
And the sow-wester help in my strenuous fight;
May my office be littered with pigs small and great,
To relieve the pig famine before it's too late

And now lend your ear while a secret I tell;
A peerage is mine, if I only do well;
Already I feel that my title I'm making,
When given my choice I'll take that of "Lord Bacon."

-- Selected.

Who's Who in Animal Husbandry Extension

In order that the animal husbandry extension group may visualize the size and make-up of the "family" the following list of State workers is presented.

Due to occasional changes in assignment and other causes, some errors and ommissions may be found. Notice of any such will be appreciated and corrections made.

It is intended to include the names of all animal husbandmen who have definite extension duties, although those who are working exclusively along dairy lines are ommitted.

Alabama.....J. C. Grimes, Leader; F.W. Burns, Specialist.
Arizona.....C. U. Pickerll, Specialist.
Arkansas.....M. W. Muldrow, Specialist.
Colorado.....B. W. Fairbanks, Specialist.
Connecticut.....J. A. Simms, Leader; R. E. Begg, Sheep and Beef Cattle.
Florida.....J. M. Scott, Leader.
Georgia.....M. P. Jarnagin, Leader; J. G. Liddell, Swine
Idaho.....E. F. Rinehart, Specialist.
Illinois.....E. T. Robbins, Specialist.
Indiana.....J. W. Schwab, General Animal Husbandry; Claude Harper, Sheep; J. R. Wiley, Swine; P. T. Brown, Beef cattle and Horses.
Iowa.....Rex Beresford Specialist; E. L. Quaife, C. W. McDonald, R. W. Snyder, Assistants.
Kansas.....R. W. Kiser, Beef Cattle, and Horses; C. G. Elling, Swine, Sheep, and Meats; M. H. Coe, Junior Clubs.
Kentucky.....E. S. Good, Leader; Wayland Rhoads, Beef Cattle; R. C. Miller, Sheep; H. G. Sellards, Swine; L. J.Horlacher, Sheep; W. J. Harris, General Animal Husbandry.
Louisiana.....L. E. Morgan, Cattle; M. M. LaCroix, Swine.
Maryland.....K. A. Clarke, Specialist.
Massachusetts.....C. J. Fawcett, Specialist.
Michigan.....V. A. Freeman, Specialist.
Minnesota.....A. A. Dowell, Beef Cattle, Sheep and Horses; H. G. Zavoral, Swine.
Mississippi.....P. F. Newell, Specialist.
Missouri.....J. W. Burch, Swine; H. M. Garlock, Beef Cattle; S. F. Russell. Sheep.
Montana.....R. L. Waddell, Specialist.
Nebraska.....M. B. Posson, Specialist; A. K. Hepperly, Assistant.
New York.....H. A. Hopper, Leader; W. T. Grams, Sheep and Wool.
North Carolina.....W. W. Shay, Swine; W. V. Hays, Assistant.
North Dakota.....George J. Baker, Specialist.
Ohio.....J. W. Wuichet, Swine; Paul Gerlaugh, Beef Cattle; L. A. Kaufman, Sheep.
Oklahoma.....Paul G. Adams, Specialist.
Oregon.....H. A. Lindgren, Specialist.
Pennsylvania.....H. H. Havner, Leader, Beef Cattle; L. C. Madison, Swine, W. B. Connell, Sheep, J. M. Vial, Horses.

South Carolina.....L. V. Starkey, Leader; E. G. Godbey, Specialist, J. R. Hawkins, Specialist.
South Dakota.....Turner H. Wright, Specialist; G. Heebink, Assistant.
Tennessee.....L. A. Richardson, Beef Cattle; J. H. McLeod, Swine; C. C. Flanery, Sheep.
Texas.....George W. Barnes, Beef Cattle; A. L. Ward, Swine.
Utah.....K. C. Ikeler, Leader; Alma Esplin, Assistant.
Virginia.....L. I. Case, Leader and Beef Cattle; George C. Herring, Swine; E. W. Lawson, Sheep.
Washington.....C. M. Hubbard, Specialist.
West Virginia.....B. F. Creech, Specialist; W. P. Ireland, Assistant, E. L. Shaw, Sheep; C. H. Hartley, Wool.
Wisconsin.....H. J. Brant, Swine and Beef Cattle; F. Kleinheinz, Sheep.
Wyoming.....D. J. Robertson, Specialist. J. A. Hill, Wool.

DOZEN ATTRIBUTES OF THE IDEAL EXTENSION WORKER

ABOUNDING FAITH in the importance of the work;
INFINITE TACT in meeting trying situations;
UNLIMITED PATIENCE in overcoming community inertia;
ENDLESS GOOD NATURE in the face of all trials;
A SAVING SENSE OF HUMOR when nothing else will meet the situation;
A LARGE VISION of the work to be done;
ABILITY TO LOSE GRACEFULLY and to rebound after each defeat;
INDOMITABLE COURAGE in standing for the right;
A GRIM DETERMINATION to see the work put though to its completion;
A CONTAGIOUS ENTHUSIASM that inspires local leadership;
UNQUENCHABLE OPTIMISM in spite of all discouragements;
UNRESERVED BELIEF IN THE IMPOTANCE OF THE FARM FAMILY TO THE COMMONWEALTH.

--Vivian.

Recent State Bulletins

The recent publications here listed are of special interest to aninal husbandry extension workers.

"The Mineral Nutrition of Farm Animals" by L. A. Maynard- Cornell (N. Y.) Extension Bulletin No. 130.

"Corn Supplements and Substitutes for Fattening Lambs" by H. D. Fox- Nebraska Experiment Station Bulletin No. 211.

"Cost of Producing Mutton and Wool on Eastern Oregon Ranges" by E. L. Potter and H. A. Lindgren - Oregon Experiment Station Bulletin No. 219.

"Cost of Producing Beef on the Ranges of Eastern Oregon" by E. L. Potter - Oregon Experiment Station Bulletin No. 220.

"Cheaper and More Profitable Pork Thru Swine Sanitation" by E. T. Robbins - University of Illinois Circular No. 306.

"Cattle Disease Resulting from Eating Damaged or Spoiled Sweet Clover Hay or Silage" by A. F. Schalk - North Dakota Experiment Station Circular No. 27.
"Money in Hogs" by J. H. McLeod - Tennessee Extension Service Publication No. 135.

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C O O P E R A T I O N

This is the law of the jungle, as old and as true as the sky,
And the wolf that shall keep it shall prosper, but the wolf
that shall break it must die.

As the ivy that girdles the tree trunk, the law runneth forward
and back,
For the strength of the pack is the wolf, and the strength of
the wolf is the pack.

--Rudyard Kippling.

How McLean County is Spreading over Illinois

By E. T. Robbins, Livestock Extension Specialist

This year in Illinois 79 counties have farm bureau demonstrations of the McLean County system of swine sanitation. The total number of cooperating farmers is about 1,200. On May 1 the lists of names were on file from 63 counties, and the total was 1,061. Besides these demonstration farms there are hundreds of others where the work has been started independently.

A big interest in the plan was aroused in Illinois last year as a result of 608 farm demonstrations in 61 counties. Although Illinois had a dry spring in 1925, and less mud than usual for little pigs to swallow, still the contrast was marked between "sanitation" pigs and those raised the old style "wormy way". With sanitation the men raised larger litters, with almost no runts; the pigs averaged 28lbs. heavier at four months old; were raised on 20 per cent less feed, and were ready for market an average of 7 weeks younger than usual. Farms having both methods in operation on the same farm last year averaged only one runt among 100 sanitation pigs and 18 runts to 100 among the pigs allowed access to old hog lots.

As an average, with sanitaiton the men raised 98 per cent of the pigs saved at farrowing time. Some of the men had become accustomed to losing half of their pigs each year from worms and necrotic infection. Even on these very wormy, germy farms last year with sanitation the owners marketed 98 per cent of the pigs saved at farrowing time.

H. M. Seymour of Adams County, a man whose fortune has made been at farming, writes: "This is the most satisfactory project which I ever tried." In 1924 from 100 gilts he saved about 700 pigs at farrowing time and raised only 375. In 1925, with sanitation, 65 gilts saved 423 pigs at farrowing time and raised 420. At four months old there were only four runts among them.

Charles H. Snyder, president of the Brown County Farm Bureau, had been losing one-third of his pigs each summer. Last year with sanitation his 14 sows saved 98 pigs at farrowing time and the count was still 98 when he turned them into the cornfield, September 10, averaging 72lbs. He writes: "These pigs made a gain of 2.2 lbs. daily per head for the 58-day period in the cornfield. They had free access to tankage.

They gained more on full feed than any I have ever fed. One and one-half pounds a day is the best I have ever had pigs to gain before. The pigs were kept on feed until January 5 and when marketed at that time they weighed an average of 303 lbs. each, thus making the average gain of each one during the 117 days amount to 231 lbs."

All of the cooperators were asked to send in written reports. About one-fourth of them did so. During the summer and the fall of 1925 I visited 254 of the demonstration farms in 30 counties. The results surpassed expectations. In many cases there was almost a miraculous change in the condition of the pigs as contrasted with previous years, or with other farms last year.

Henry County is the leading hog county of Illinois, with 139,515, hogs enumerated in the census of 1925. Under the leadership of County Agent J. W. Whisenand it has also become the leading county in swine sanitation demonstrations. There were 72 careful farm demonstrations there this year, and besides a very large proportion of the farmers have adopted the system. Little hog houses for field use dot the pastures all over Henry County. Last winter one lumber company in Galva in Henry County, sold 130 A-shaped hog houses and the Farmers' Elevator Company sold over 70. Both firms sold farmers the lumber to make many more little houses themselves.

This spring the sanitation pigs are coming along in fine shape. On April 27, in company with County Agent F. W. Garrett of Douglas County, I visited six of the sanitation farms. All of those pigs were good and "peppy". None coughed. One of these men, Wm. McCarty, who began the system last year, has over 80 pigs a month old saved by 10 sows in little A-shaped houses out in the woods. We stopped at the farm of one large hog raiser who thinks he can do well enough without sanitation. Most of his pigs were listless, many coughed, some are already getting runty and we noticed one case of bullnose. We will convince that man this season.

The demonstrations this year will give most of the hog raisers in Illinois an opportunity to see just how the McLean County system of swine sanitation works under ordinary farm practice, without expert assistance in performing the details. Thus the work started in the fall of 1919 in McLean County by Dr. B. H. Ransom and Dr. H. B. Raffensperger of the United States Department of Agriculture has exerted a wide influence. It is spreading McLean County all over Illinois.

If the other fellow can, you can -- because to the other fellow, you are the other fellow.

National Live Stock and Meat Board

The following useful publications are available from Mr. R. C. Pollock, General Manager of the above, mentioned organization, whose address is 407 So. Dearborn Street, Chicago, Illinois.

"Ten Lessons on Meat"

"Meat for the Family"

"The Story of Livestock and Meat"

"A Meat and Vegetable Diet versus A Strictly vegetable Diet."

Some other organizations that issue valuable printed information from time to time are:

The Horse Association of America,
Union Stock Yards,
Chicago, Illinois.

The Institute of American Meat Packers,
509 South Wabash Avenue,
Chicago, Illinois.

International Harvester Company,
Chicago, Illinois.

Swift & Company,
Public Relations Department,
Chicago, Illinois.

The National Committee on Boys' and Girls' Club Work,
58 East Washington Street,
Chicago, Illinois.

The National City Bank,
New York, N. Y.

Wise men are instructed by reason; men of less understanding, by experience; the most ignorant by necessity; and the beast by nature. -- Cicero.

ANNUAL REPORT BRIEFS

(A few reports were not available at the time this material was prepared)

ARIZONA

SALT -- During the last two years a demonstration showing losses of salt when exposed under range conditions was conducted. The rainfall at Prescott where the work was conducted averages slightly over 15 inches a year. The following table shows the losses at certain periods and the total loss after 648 days, or approximately 1 year and 9 months.

Date of wieghing	Block salt, 3½% of sulphur			Common block salt			Kansas rock salt			Sheep salt	
	On ground	In open trough	In covered trough	On ground	In open trough	In covered trough	On ground	In open trough	In covered trough	In open trough	In covered trough
	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.
Oct.3, 1923	50.0	60.25	60.75	49.75	60.25	60.75	51.75	70.5	69.75	64.25	61.5
Aug.14 1924	35.5	48.0	59.0	36.0	48.0	59.5	35.0	53.0	66.0	46.5	60.0
Nov.25 1924	34.0	46.0	58.0	31.0	46.0	59.0	32.0	50.0	64.0	39.0	60.0
July13 1925	20.0	35.0	57.75	21.25	39.0	58.50	26.5	47.5	61.25	31.75	59.25
Total loss	30.0	25.25	3.0	28.5	21.25	2.25	25.25	23.0	8.5	32.5	2.5

CULLING EWES.-- In order to bring out the necessity for culling ewes based on wool production, some preliminary grading was done with four flocks, as shown in the following table:

Fleeces weighing less than -

Flock No.	4 lbs.	5 lbs.	6 lbs.	7 lbs	8 lbs	9 lbs.	10 lbs.	11 lbs.	12 lbs.	13 lbs.	14 lbs.
	%	%	%	%	%	%	%	%	%	%	%
1	1.92	3.85	19.23	61.54	76.92	92.32	96.15	100	0	0	0
2	0.5	1.0	5.76	25.56	50.37	78.70	91.48	96.49	98.75	100	0
3	0	1.0	3.92	11.45	25.49	50.98	77.45	89.21	95.09	100	0
4	0	0	0	2.0	2.0	8.0	18.00	54.00	78.0	88.0	98.0

AVERAGE FLEECE WEIGHTS -- Flock 1, 6.79 pounds; Flock 2, 7.26 pounds; Flock 3, 8.85 pounds; Flock 4, 10.88 pounds.

SCOURING RESULTS -- Composite samples of wool from each flock were scoured with the following results: Flock 1, 60.19 per cent shrinkage; Flock 2, 62.02 per cent shrinkage; Flock 3, 56.31 per cent shrinkage; Flock 4, 54.52 per cent shrinkage.

This information will be used to further the ewe-culling subject.

PUREBRED SIRES. -- Under this project more than 500 purebred bulls and 800 purebred rams were placed, as well as three stallions

DEHORNING. -- Demonstrations have been conducted with 22 cooperators involving approximately 15,000 head of cattle.

COST-OF-PRODUCTION STUDIES. -- Ten idividuals cooperated in this work which included about 30,000 cattle and 40,000 sheep. This project was in cooperation with the Arizona Cattle Growers' Association.

SUPPLEMENTAL FEEDING. -- Forty-two owners cooperated in this project, affecting about 60,000 cattle and 50,000 sheep.

FATTENING. -- Fifteen demonstrations including 42,000 cattle were conducted, while four sheepmen owning 25,000 sheep were reached.

REVEGETATION. -- There were eight cooperators in this work which covered about 15,000 acres.

ARKANSAS

TON-LITTERS.-- Three ton-litters were produced. Seven other litters entered all of wnich made creditable showings, but were sold or otherwise disposed of before the end of the 180-day period. The heaviest litter, which weighed 2,239 pounds and consisted of 12 pigs, cost $7.13 a hundredweight to produce. Another litter of 10 pigs, which weighed 2,200 pounds, cost $7 a hundredweight to produce. The two litters which were exhibited at the State fair were purchased by the Little Rock Packing Company at one-half cent premium over the St. Louis market for the day.

BABY-BEEF CLUBS. -- In Washington County 41 head of calves were fed out and exhibited at the county fair, selling at satisfactory prices. These calves were practically all from small farms using a beef type of cattle in supplying the home milk supply. Tne fathers of the boys were unanimous in stating that the plan was an excellent one for disposing of the surplus calves.

COLORADO

CATTLE FEEDING. -- Rations, selection of feeders, length of feeding period and other problems had attention in northern Colorado. Conservation of hay is an important consideration. A 3-day tour was conducted in February on which 20 farm stops were made to study methods and results. Each evening a meeting was held for the purpose of summing up what was seen during the day.

IRRIGATED PERMANENT PASTURES. -- Numerous demonstrations using Morton's Mixture were conducted. This mixture, which was worked out by Professor George E. Morton, consists of the following: Brome grass 15 pounds; orchardgrass 15 pounds; meadow fescue 10 pounds; timothy 6 pounds and yellow-bloossom sweet clover 4 pounds. From 30 to 35 pounds of the mixture are sown per acre.

TON-LITTERS. -- In practically every instance, the 19 litters that reached the goal were fed a grain ration supplemented by a protein concentrate and had legume

pasture. Two contestants, under dry-land conditions, showed profits of $72.62 and $100.82 over feed costs.

JUNIOR CLUBS. -- Enrollments in livestock clubs included 583 boys and 57 girls. Of these, 410 boys and 39 girls completed. The animals involved totaled 1,182.

DIRECT MARKETING. -- Returns on the marketing of 3,184 head of feeder cattle to the Corn Belt last year netted only 82.6 per cent of the gross proceeds of the sales. Since this is considered less than may be obtained by consignment to central markets, few if any Colorado producers have continued the system this year. However, direct marketing was encouraged by helping to make contracts between feeders and producers, the sales being made on the ranch.

Controlled Breeding. -- Increasing the calf-crop precentage is one of the large problems. One cooperator by keeping his bulls and cows separated until June 25 obtained an 85 per cent calf crop. Another by furnishing 8 bulls to each 100 cows obtained a calf crop of over 90 per cent. One demonstrator by pasture breeding and using 1 bull to each 40 cows was able to get a 90 per cent calf crop. In another instance pasture breeding increased the calf crop from 38 to 80 per cent.

Cost-of-Production Studies. -- In cooperation with agricultural economists this work was conducted with 36 range cattlemen in 14 counties. The results will e used as the basis for various extension projects.

Ewe Culling. -- Three demonstrations of ewe cullinng based on wool production were held. The summary of the fleece weights was as follows:

	Flock 1	Flock 2	Flock 3
Total sheep sheared	1,792	1,545	971
Fleeces weighing 7 lbs. or over	896	872	902
Fleeces weighing under 7 lbs.	896	673	69
Av.wt. of over-standard fleeces	8.49 lbs	8.96 lbs.	11.14 lbs.
Av. wt. of under-standard fleeces	5.38 "	4.50 "	5.6 "
Av. wt. of all fleeces	6.92 "	7.0 "	10.75

GEORGIA

Methods. -- County agents, both white and colored commercial organizations such as bankers, railroads, packers, etc., and such agencies as fair associations, civic clubs, and the farmers themselves all heartily cooperated with the college in promoting the project. General and special meetings and method and result demonstrations all contributed something to the success of the work. Bulletins, circular letters, and press articles were also used to advantage.

Results. -- Out of 10 ton-litter entries 6 made the goal. Four carloads of barrows were exhibited in the National Hog Show contest at Atlanta. Pig club members were enrolled to the number of 1,900 Sixty-five county livestock judging contests were held. Two months were given to local leader training schools.

In Brooks County, through the cooperation of local business men, 58 gilts were distributed among the boys of the county. by whom they were fed and cared for under the supervision of the county agent until shown in the fall. Fifty-two of the original gilts with their litters, a total of 272 head, were on display

and competed for the individual and group prizes offered by the cooperating agencies. Those sold brought satisfactory prices and most of them went back to the farmers of the county for breeding purposes.

IDAHO

Purebred Cattle Industry. -- Lists of bulls for the range trade made up each spring brought out less numbers than usual. The number listed for sale was 258, of which all but 75 were placed. Late season demand has been stronger, and it is hoped that the anticipated improvement in outlook has arrived.

Sheep. -- The trend in time of marketing Idaho lambs is shown in the following table:

Year ending May 1	- 1923	- 1924	- 1925
	Per cent	Per cent	Per cent
From Summer range	49.27	73.73	79.78
From fall pasture	34.46	14.15	15.70
From winter feed-lots	16.26	12.12	4.52

In cooperation with the Idaho Wool Growers' Association a project on lamb marketing problems was conducted. A summary of results during the year is as follows:

Month Shipped	Nunber	Fat lambs			Feeder lambs		
		Per cent of total	weight	Price Per cwt.	Per cent of total	weight	Price per cwt.
			Lbs.			Lbs.	
June	130,409	94.11	74.96	$15.73	5.89	61.80	$12.83
July	167,310	84.29	76.62	14.75	15.71	63.93	13.84
August	157,497	70.41	78.85	14.88	29.59	65.73	14.49
September	48,000	59.38	75.53	15.17	40.62	64.28	14.69
October	37,537	64.19	75.79	15.64	35.81	65.37	15.64
	540,753	79.01	74.18	$15.05	20.99	64.22	$14.52

Lambs Classified as to Markets

	Chicago	Omaha	Denver	Total
Total lambs shipped	144,776	313,685	82,292	540,753
Lambs sold fat	113,920	235,090	28,232	427,242
Lambs sold as feeders	30,856	78,595	4,060	113,511
Percentage fat	78.69	74,95	95.07	79.00
Precentage feeder	21.31	25.05	4.93	21.00

Average price fat lambs per head	$11.28
Average price feeder lambs per head	$ 9.33
Average price per lamb	$10.86

Cost of Producing Grade Sheep on the Farm

The Idaho Wool Growers Association surveyed the farm-sheep industry of southern Idaho and reports the flocks averaged 43 head in size. The costs on a per head basis were found to be as follows:

Labor	$ .98	Taxes	$ .35
Hay and grain	2.36	Loss and depreciation	.71
Supplies	.25	Interest	.83
Pasture feed	2.44	General expenses	.12
Shearing	.13		
		Total	$ 8.17

Receipts, from wool, $3.70; from lambs, $7.66; total, $11.66 Profit per head $3.19

Utilization of Aged Range Ewes

Ewes discarded from the range on account of failing teeth are usually disposed of as follows: (a) Fattening in feed lots; (b) shipping to eastern markets, and (c) using as one-year breeders. The latter use is becoming a well-established practice in this State in which they are used as the foundation for grade farm flocks The actual value of such ewes has been difficult to determine. The local price has varied from 25 per cent to 80 per cent of what a sound-mouthed ewe is worth. Until more research is conducted the basis for buyimg them is 40 per cent of the value of sound mouthed ewes. It is generally conceded that the rangeman is entitled to as much for his discarded ewes as they could net him on the eastern markets. To determine this point records were kept on shipments to three main markets this year The results were as follows:

	Number ewes	Average weight at market	Average price per cwt.	Average price per head
June	1,593	115.0	$5.71	$6.57
July	3,287	111.4	5.28	5.89
August	2,408	110.5	6.73	7.44
September	4,786	110.3	7.86	9.08
October	1,927	110.7	8.14	9.00
	14,001 head	111.2 lbs.	$6.86	$7.62

The average expense of shipping was $1.50 per head, hence the Idaho value per ewe by months was as follows: June $5.07; July, $4.39; August, $5.94; September, $7.58; October, $7.50.

There were placed for farm-flock demonstrations use 11,881 old ewes at an average price per head of $5.50, most of them being bought during the early summer.

The records of some of last year's work in this field is summarized as follows:

Number of ewes	13,859
Number lost	1,392
Per cent lost	10
Average wool per ewe	6.4 lbs.
Per cent lamb crop sold	85
Profit per ewe	$0.35

ILLINOIS

Methods. -- Demonstrations were the principal means used in teaching the animal

husbandry projects. Two-thirds of the specialist's time in the field was spent in preparing leaders for local demonstrations. Farm meetings and county tours served to spread information among other farmers. Other meetings, correspondence, and press notices also proved of benefit.

The farm advisers (county agents) are the principal means of contact with local farmers. They select the individuals to demonstrate the projects, keep tab on their work, and arrange for method and result meetings. The farm adviser in the real local motive force, although he may shift nominal responsibility onto the farm bureau or a committee of farmers.

Swine Sanitation. -- This project was promoted in 61 counties, and 720 farmers enrolled as project leaders or demonstrators. They were instructed early in the year in one-day county schools. For different reasons some dropped out until the number was 631, of whom 608 conducted reasonably thorough work. The system was based on the simple plan of cleaning the sows and pens before farrowing and clean pastures, to which the sow and pigs were hauled and kept there until the pigs were 4 months old.

The organized procedure involved 12 different steps or activities as follows:

1. Selection of local project leaders.
2. Winter schools for project leaders.
3. Management by committee of project leaders.
4. Spring conference of project leaders.
5. Spring farm visits by farm advisers.
6. Placing sanitation farm posters.
7. June, local demonstration meetings.
8. July to October, county tours.
9. County fair exhibits.
10. Information cards handed out at fairs.
11. Written reports of projects leaders.
12. Publicity of results.

The leaders' reports show that from 1 to 3 more pigs per litter were raised. In most cases as many pigs as usual were raised from on-third fewer sows. Over 95 per cent of pigs saved at farrowing time were marketed. Eighteen farmers in 8 counties saved 1,910 pigs at birth and had 1,881 of them alive in the fall. Sixteen additional counties are on the list for this work in 1926.

Large-Litter Sows. -- The requirements for enrollment as "Star Sows" are the raising of at least 9 pigs to 60 days of age for sows over 24 months of age and at least 8 pigs to the same age for sows between 12 and 24 months of age. Each time a sow meets these requirements a star is added to her record on the list. One County carried this project this year and 19 sows reached the goal. The average weights of pigs from these sows at 60 days ran from 31 to 46 pounds.

Half-Ton Calf Club. -- Nine calves completed the year's record but only two made the required weight of 1,000 pounds or more at 365 days of age.

Early Lambs. -- This project deals with preparing lambs for market by June 15. Thirteen counties cooperated. Supplemental feeding information and docking and castrating demonstrations were given. Clark County records show a premium of $3.00 to $4.00 per hundredweight received for docked and castrated lambs.

MARKETING. -- Better marketing of livestock was aided principally through the 12 shipping association schools, held in February, at which the various subjects were presented and discussed. The number of livestock shipping associations in the State at the close of the year included 515 local and 22 county organizations, 93 of which are incorporated.

HIGH SCHOOL JUDGING CONTESTS. -- The college cooperated with the agricultural teachers of the high schools in conducting 10 sectional judging contests, in which 94 schools participated. The State contest was held at the university, and 87 schools with 715 boys entered. Of these, 253 contestants representing 85 schools, participated in the fat-stock division.

INDIANA

SWINE. -- Five hundred and seventy-six swine production demonstrations in 73 counties were started. One hundred and seventy-nine demonstrators completed the project to weaning time, and 93 to the time the pigs were 180 days old. Sanitation as it influenced the number of pigs raised was demonstrated on 160 farms. Thirty-one demonstrators cleaned farrowing pens before sows were put in, raising an average of only 5.05 pigs per litter. Sixty-four demonstrators not only cleaned but also disinfected the farrowing pens, raising an average of 5.67 pigs per litter. Fifty demonstrators cleaned and disinfected farrowing pens and also washed sows before putting them into the pens, raising 6.85 pigs per litter. Fifteen men followed all three of the above practices and in addition put their pigs on fresh pasture during the suckling period, raising an average of 8 pigs per litter. Market types of hogs and rations for fattening were taught to 1664 persons at 20 demonstrations held at local or central stockyards in connection with shipping associations.

SHEEP. -- Results obtained from 56 demonstrations in sheep production in 21 counties were discussed at 51 demonstration meetings. One hundred and sixty-seven feeding demonstrations were completed in 27 counties and 29 meetings and 100 farm visits were made in connection therewith. More than 1,000 wool growers attended the 43 wool-grading demonstrations. More than 900 men and boys learned how to dock and castrate lambs.

EXHIBITS. -- Fifty educational exhibits were prepared for use in county agents' offices. It is estimated that 50,000 people view such exhibits annually. Large exhibits were prepared for the State fair and the International Live Stock Exposition.

Community Effort. -- The animal husbandry and the boys' and girls' club divisions, in cooperation with the Indiana Livestock Breeders' Association are encouraging community effort in a balanced agriculture by offering a handsome bronze buffalo trophy to the community or township organization that fosters the greatest number of boys' and girls' club and men's club members in their territory. The purposes of this enterprise are to encourage the proper economic relationship between crop and livestock production and a closer contact between junior and senior activities. Thirty-one communities are entered in this contest.

KANSAS

JUNIOR CLUBS. - At the three leading fairs of the State junior clubs members exhibited a total of 104 beef calves, 145 pigs, and 59 sheep and lambs. The beef

clubs enrolled a total of 486 members owning 668 cattle. Swine clubs had a membership of 1,333 boys and girls who owned 6,492 animals. Sheep clubs attracted 118 members with 253 animals.

JUNIOR JUDGING TEAMS. -- Junior teams placed as follows in interstate contests: At Sioux City competing against 12 teams, won first; at Kansas City, second; and at Chicago, against 22 teams, won fifth.

KENTUCKY

BEEF CATTLE. -- Sixty-two pasture and 25 winter feed-lot demonstrations were held. Faulty feeding practices demanded correction. One class of feeders fed an excess of cottonseed meal and another fed no protein supplement. At the present time about 80 per cent of feeders are using efficient and economical rations.

BETTER SIRES. -- Kentucky maintained her position at the top of the list in the "Better Sires - Better Stock" campaign. Each county agent did some work on this project during the year. Better -sires exhibits were seen at 48 county and local fairs and a large feature exhibit was shown at the State fair.

SWINE. -- The principal work in this field was the ton-litter project.

CUTTING AND CURING DEMONSTRATIONS. -- This work was again one of the most popular activities, there being 35 demonstrations in 17 counties, which were attended by 556 men and women. The county agent's report from one of the counties indicates that 200 farmers in his county followed the recommendations given, while 775 farmers in other counties were reported as doing similarly.

ROUNDWORM CONTROL. -- Fifteen demonstrations of the capsule methods of treatment were given.

FEEDING. -- Four feeding and five "hogging-down demonstrations were completed to point out the value of protein supplements and choice of same.

EXHIBITS. -- An educational exhibit contrasting properly and improperly cured and packed hams was shown at the State fair with good results.

BREEDING STOCK. -- Thirty-five purebred sows were placed with farmers for breeding purposes.

DOCKING AND CASTRATING LAMBS. -- Progress in this field is shown by the fact that 70 per cent of the lambs markerted from Kentucky sources during 1925 were docked and castrated while in 1919 this practice was shown to have been used on less than 2 per cent of the lambs. During the year the specialists conducted 113 demonstrations on this project in which over 60,000 lambs were trimmed. Statistics gathered on more than a million lambs during the 5 years' work in this State show that the farmer has profited by slightly more than $1.00 per hunared pounds by following this practice. Forty-eight general lamb standardization meetings were held during the year.

SHEEP STOMACH-WORM CONTROL. -- Seventy-one drenching demonstrations were conducted during the year. Treatments were advocated at least monthly throughout the spring and summmer and until cold weather.

BETTER RAMS. -- The use of purebred rams has more than doubled in the last five years. During that period the specialist has assisted farmers in introducing into the State 21 carloads of purebred sheep for the purpose of supplying, from local sources, the purebred rams needed. An accredited farm-flock association has recently been organized for furthering the objects of sheep improvement.

LOUISIANA

JUNIOR CLUBS. -- Pig club work has been the most prominent single factor in the improvement of the hogs of the State. Pig-club members totaled 1,538 as compared with 2,173 in 1924, and calf-club enrollment was 144 as compared with 119 in 1924. Complete records were obtained from 31.4 per cent of pig-club and 46.5 per cent of calf-club members. Forty club members showed 42 pigs at the State fair. The 4-H judging team received third place at the Ft. Worth contest.

GENERAL. -- A total of 13 purebred hogs were placed with farmers in 4 different parishes. Three internal-parasite-control demonstrations were conducted. Two hog self-feeder construction demonstrations were held.

MARYLAND

TOURS. -- A sheep tour was conducted in St. Mary's County, as a result of which 12 good purebred rams were placed and a pureberd flock established

SHEEP CLUBS. -- A sheep club was organized in Garrett County and 28 purebred Shropshire ewes were placed with 14 members on 9 different farms.

BETTER SIRES. -- In cooperation with the Baltimore & Ohio Railroad and other agencies a week's better-sires campaign was conducted. As a result of the effort about 50 purebred rams, 20 ewes, and several purebred hogs were placed.

TON-LITTERS. -- Four of the 9 entries attained the goal of 1,500 pounds or more in 150 days. Three counties were represented.

MICHIGAN

GENERAL. -- About one-third of the time was spent on swine problems, one-third on sheep, and the remainder on beef cattle, horses, and general activities including junior clubs. The main problems in connection with swine were reducing cost of production by using protein supplements, home-mixed minerals mixtures, controlling parasites, selecting better breeding stock, and improved management of sow and litter so as to save more pigs per litter. Two types of meetings were used to promote the projects - general indoor gatherings, and special hog-producers meetings usually held on farms where animals and equipment were available for demonstrations. It is believed that the latter type, although attended by fewer people, served the better purpose.

Sheep. -- The subject of sheep was discussed in many of the general meetings In Barry County 5 demonstration farms have been established where a definite program of demonstrations are held during the year, the topics presented varying with the season, such as selecting and culling, parasite control, winter feeding and care, management at lambing time, preparation of fleeces for market, docking, castrating dipping, etc.

In cooperation with the Michigan Fine Wool Sheep Breeders' Association a record-

of-merit plan is being undertaken. Eight breeders who took up the work the first year have had 18 sheep surpass the minimum standards of fleece weights. The ram fleeces ran from 25 to 30.3 pounds and the ewes from 16 to 22 pounds. Seven other breeders are cooperating in the work which touches 7 different counties.

Tours. -- Forty-five breeders participated in a Hereford cattle tour on which 325 miles were traveled in two days and 18 farm stops made.

MINNESOTA

FEED-LOT DEMONSTRATIONS. -- The beef-cattle and farm-management specialists cooperated in this work. The former handled the selection of feeders, desirable equipment, proper rations, etc., while the latter discussed the relation of beef cattle to the farm busiess, market trends, and future outlook. Often the forenoon is devoted to the production phases at a feed lot, and during the afternoon an indoor meeting at the community center is held where both specialists talk. Such meetings are usually held when cattle are being started on feed. When possible a tour of the same farms is arranged at the end of the feeding period. These feed-lot meetings have been most effective in getting better practices into the program of the farmers, because simple, practical demonstrations are possible and only those interested in the subject attend. They are real business meetings and not mere social gatherings.

Meetings of sheepmen have been conducted along the same lines equally good with equally good results.

SWINE-FEEDING SCHOOLS. -- Fifty-three meetings with an average attendance of 57 were held in 23 counties. Breeding, feeding, and management practices were discussed.

JUNIOR CLUBS. -- In connection with this project 41 meetings were held with an average attendance of 67. Several tours to visit demonstrations were also conducted.

The fourth anual junior judging contest at the State fair was staged. The winning team competed in the International contest at Chicago where it won third among 22 States.

The annual State club show at South St. Paul was in charge of the specialist. There were 379 baby beeves, 110 hogs, 144 lambs and 55 coops of poultry shown by club members, which was the largest exhibtion of the kind ever held.

MISSOURI

General .--Following is a summary showing goals and accomplishments in 1924 and 1925:

Item	Hog sanitation		Hog feeding		Ton litters	Cattle feeding		Beef-herd demonstrations.		Early lambs	
	Demonstrations	Farms adopting practice	Demonstrations	Farms adopting practice		Demonstrations	Farms adopting practice	Demonstrations	Farms adopting practice	Demonstrations	Farms adopting practice
Accomplished in 1924	53	273	28	---	27	12	---	3	---	26	201
Accomplished in 1925	57	276	65	362	37	23	72	8	63	32	276
Goals for 1925	87	322	53	276	102	21	80	22	115	40	108

CATTLE FEEDING. -- A summary follows:

Demonstrations	5	3	3	2	4
Number of head	171	280	168	86	383
Age	Calves	2-yr-olds	2-yr-olds	2-yr-olds	2-3-yr.-olds
Days fed	153	200	145	179	165
Daily gain, pounds	2	145	1.84	1.45	.64
Rations	Corn, Oats, Legume Hay, C.S. or L.S. meal	Pasture, Silage Corn, Legumes hay, C.S. or L. S.meal	Corn, Legume hay, Shock corn, C.S. meal	Silage, Legume hay, C.S.meal	Pasture, Corn fodder, Corn, Hay and stalks
Cost 100 lbs. gain	$10.10	$11.17	$14.92	$ 9.57	$14.40
Profit per head	$12.03	$ 6.30	$ 3.46	$19.64	$ 5.35

Price of feeds: Corn, $1.00 to $1.10; hay, $12.00 to $15.00; silage, $8.00; cottonseed meal, $50.00; linseed meal, $52.00.

BEEF-HERD DEMONSTRATIONS. -- Summary of four typical demonstrations.

Number of calves	10	17	31	32
Feed cost per cow	$29.83	$32.40	$17.00	$19.00
Grain fed per calf (Bu. corn	11	39	3	- - -
(Bu. oats	4.5	10	0.5	- - -
(Bu. oil meal	- - -	76	- - -	- - -
Gain cost per calf	$9.17	$48.40	$3.00	- - -
Total feed cost, cow and calf,	$41.00	$80.80	$20 00	$19.00
Value of calf	$68.00	$90.36	$30)0	$29.80
Profit per calf	$27.00	11.56	$10 00	$9.20

These demonstrations have shown clearly that the feeding of grain to calves while nursing increases both weight and value. Calves fed grain averaged about 100 pounds more per head at weaning and were worth $2.00 a cwt. more. So much interest has been shown in this project that demonstrations will be undertaken in 20 counties in 1926.

BABY-BEEF CLUBS. -- Clubs were organized in 21 counties with a total membership of 296 boys and girls. A total of 225 calves were shown and sold at the Kansas City and St. Joseph club shows.

EARLY LAMB DEMONSTRATIONS. -- Lambs docked and castrated totaled 7,199; those that were creep-fed grain numbered 6,249; and 128 pureberd rams were placed. A summary of typical demonstrations follows:

Summary of Typical Demonstrations

	Lambs marketed before June 10	Lambs marketed June 20 to July 10
Number demonstrations	3	5
Number lambs	116	173
Average weight	71.5	74.9
Average price per cwt. of top lambs	$15.60	$15.20
Number culled	0	5
Price of culls	0	$8.80
Cost of concentrates per 100 lbs. lambs	$1.24	$1.66

PARASITE CONTROL. -- In this work 13,934 sheep were treated with bluestone solution as compared with 5,805 last year.

HOG SANITATION. -- A typical demonstration showing the value of proper sanitation in hog production was as follows: Eighty-four pigs were farrowed in cleaned and disinfected pens. At two weeks of age the pigs were divided into two lots, 34 being moved onto worm-free pasture and the remaining 50 pigs turned into an old hog pasture. When the pigs were three months old, those on clean ground averaged 68 pounds and the others 56. pounds. When the clean-pasture pigs were ready for market they weighed 182 pounds and sold for $12.50 per cwt., and it was necessary to carry the other pigs a month longer, when they sold for $11.00 per cwt. The feed cost per 100 pounds gain was $7.00 for the clean-ground pigs and $7.74 for the other . Net results showed that a loss of $4.50 per head was sustained because the 50 pigs were put on worm-infested ground. Fifty farmers saw the results of this demonstration and many others got the story at the county fair where an average pig from each lot was shown.

MONTANA

TOURS. -- A total of nine tours in seven counties with a total attendance of 443 persons were conducted.

EWE CULLING. -- Reports were received on 16,852 sheep, the owners of which had followed the wool-weighing system of culling. The culled ewes averaged about 13 per cent of the total and the average weight was increased by from 0.3 to 0.4 pound per fleece.

MEETINGS. -- Thirteen meetings of sheepmen attended by 322 persons owning 386,000 sheep were held. Thirty-two general meetings in 18 counties were attended by 2,003 persons.

CATTLE GRADING.-- Four cattle grading demonstrations in three counties were put on with the assistance of James K. Wallace of the U. S. Bureau of Agricultural Economics. This was well received.

NEBRASKA

GENERAL. -- An earnest effort was made during the year to get maximum results by a close adherence to organized projects. Of the 176 meetings attended, 171 were called for the purpose of furthering definitely accepted projects. In some former years we have attended 30 to 40 meetings of more or less general nature, many of which demanded from us mere entertainment.

SWINE SANITATION. -- A long time program on hog-lot sanitation has been put into force. This plan calls for definite steps every year for 5 years. The first year's procedure has now been carried out in 17 counties and 9 of them have completed the second year's work. About 8 new counties will be started each year.

Table showing 1925 Results

	Farms on which pigs were farrowed in small houses and raised exclusively on clean ground.	Farms on which pigs were farrowed in large houses properly scalded, then moved to clean ground.	Farms on which only a part of the sanitation plan was carried out.
No. farms reporting	81	35	16
Av. no. sows per farm	12.6	12.4	12.2
Av. no. pigs raised per sow	6.5	6.2	5.5
Per cent of farrowed pigs raised	85	85	78
Farms feeding full ration	23%	17%	20%
" " medium "	40%	45%	43%
" " light "	37%	38%	37%
Av. no. runts per farm	0.9	2.3	2.5
Farms producing uniform pigs	85%	65%	50%
Av. wt. pigs at 6 mos. old	180 lbs.	165 lbs.	140 lbs.
Pork produced per sow in 6 months	1,170 lbs.	1,023 lbs.	770 lbs.
Value of pork per sow at 9¢ per lb.	$105.30	$92.07	$69.30
Value of pork per farm at 9¢ per .lb.	$1,326.78	$1,141.66	$845.46
Increased income from sanitation	$481.32	$296.20	- - -

METHODS.-- Probably the most effective procedure in the swine-sanitation work is the "runt" meeting. A series of such meetings is being held in each county where the work has begun, each meeting being held during the month or so preceding farrowing time in that section. A typical procedure is as follows: The meeting has been called for 10 A. M. on some farm where pig troubles have been experienced. The meeting has been well advertised and the farmers have been asked to bring runty pigs under four months of age. Several farmers have brought runty pigs caged in boxes or crates. The county agent, animal husbandry specialist, and a Federal veterinarian are in attendance. Much fun is experienced as each man is asked to exhibit his runt, and general interest is aroused. By 10:20 the veterinarian starts his discussion of ordinary pig ailments suchas roundworms, bull-nose, pig typhoid, etc., and talks for about 30 minutes. The specialist then follows with a chalk-talk, using a black board or side of a barn, and tells of instances where farmers have had sucess by following the system advocated. When all questions have been answered the runts are killed and "posted". All arguments are clinched by actually pointing out the effects of round worms and filth-borne diseases. The veterinarian does all the post mortem work, and it is a mighty poor meeting if at least two or three good cooperators are not located. The meeting is over before noon.

MEAT DEMONSTRATIONS.-- This project is staged in cooperation with the foods and nutrition workers. The way in which the work is presented has much to do with its popularity. Both men and women are interested, the former helping in the slaughtering and the latter in canning, pressure cooking, and soap making, while both groups participate in the cutting and curing. Eighteen demonstrations were held with an attendance of 769.

BABY-BEEF-CLUBS.-- The number of clubs organized was 35, and 280 boys and girls were enrolled, of which 199 completed their projects. Calves exhibited by club members at the State fair, totaled 170.

PIG CLUBS.-- Eighty-eight clubs were organized with an enrollment of 716 boys and girls, 480 of which earned achievement certificates. Club pigs to the number of 164 were exhibited at the State fair.

SHEEP CLUBS.-- Five clubs with an enrollment of 35 were organized. Lambs raised, totaled 38, 14 of which were shown at the State fair.

NEW MEXICO

CULLING DEMONSTRATIONS.-- Twenty-one culling demonstrations with beef herds, attended by 670 ranchers were conducted.

DEHORNING DEMONSTRATIONS.-- About 12 were held, 5 being in one county. In one demonstration 1,103 steers, 1,000 calves, and 70 bulls were dehorned by the specialist.

BETTER SIRES. -- Purebred sires to the number of 250 beef bulls, 98 rams, and 19 boars were placed.

FARM FLOCKS.-- Under this project 8,117 sheep were placed, some being old ewes and some club lambs raised by boys and girls.

EWE CULLING.-- Four demonstrations in ewe culling were held, involving 7,890 sheep. In one of these 3,015 ewes were included. Of these 361 had an average fleece weight of 3.61 pounds, while the remainder averaged 7.859 pounds. By culling out all that sheared below 7 pounds, the flock average was increased to 9 pounds. In one of

the other flocks the standard fleece weight was established at 6 pounds and in another at 9 pounds.

FLUSHING.-- Four men cooperated in this work; last year only one man took up the project. From 91 ewes the results were 54 sets of twins, 3 sets of triplets, 31 single lambs, and 3 ewes failing to lamb.

RANGE EWES PASTURED BEFORE LAMBING.-- In one case where a band of range sheep were brought in and pastured a few weeks prior to lambing, 110 per cent of strong vigorous lambs were obtained. In another instance the same method increased the lambs saved by 10 per cent over any previous year.

TRENCH SILOS.-- Eight special silo meetings attended by 452 persons were held in addition to the attention given to this subject in general meetings. As a result, about 42 new trench silos were constructed. They are very popular, as indicated by the fact that 110 were filled this year.

POISONOUS PLANTS.-- Farmers directly reached in this work numbered 173, and the area eradicated of loco embraced 413 sections.

UNNECESSARY BRANDING.-- A cooperator who did not use the open range was induced not to brand his calves. As a result he was able to get a premium of $2.00 per head on his 300 calves.

NORTH CAROLINA

SWINE FEEDING DEMONSTRATIONS.-- During the year 16 counties cooperated in this work with 107 demonstrations started. Of these 71 were completed, 14 are still under way, and the remainder lapsed; 1,096 hogs were involved in the completed work.

Results of Completed Demonstrations

Average weight of hogs when sold	175 lbs.
Average initial weight of hogs	72 "
Average gain per hog	103 "
Feed consumed per 100 lb. gain	354 "
Average length of feeding period	80 days
Average daily gain per hog	1.29 lbs.

Financial

1096 hogs weighing 199,298 lbs. @ $13.055	$26,018.36
Value of gains - 113,349 lbs. @ $13.055	14,797.71
Feed cost of gains, corn at $1.35 per bu	4,676.18
Average cost per 100 lbs. gain	8.93
Market value of plant food in manure	1,958.93
Average profit per 100 lbs. gain	4.13
Average returns per bu. of corn	2.14

If the 5937.63 bushels of corn fed to these hogs was produced at a cost of $.75 per bushel, which according to surveys made is approximately correct, the profit over feed cost was $8,217.63, or $7.25 per 100 lbs. gain, and the plant food remaining on the farm should amply pay for the labor of feeding.

OHIO

GENERAL.-- Herd and flock culling or selection of breeding stock, school for county fair judges, ton-litter work, and livestock clubs have all been promoted. Feeding schools, feeding demonstrations, ton-litter clubs and some phases of junior club work have been promoted to bring out the value of efficiency in feeding. In order to familiarize producers with market demands and seasonal fluctuations, grading and marketing demonstrations have been held. Parasitic prevention and control, especially in sheep and hogs, have also been featured in demonstration and lecture.

SWINE SANITATION.-- More than 100 farms in 32 counties have cooperated in this project. Two typical examples of results are an increase in pigs raised per sow from 2.3 before control measures were employed to 7.1 and reduction of cases of "bull-nose" of from 30 to 50 per cent to nothing, when sanitary precautions were used.

HOG-PRODUCTION RECORDS.-- Records were kept by 14 farmers in 3 different counties for the purpose of determining the factors which most influence profits or losses. This information in turn is used in formulating corrective measures.

JUNIOR CLUBS.-- Most of the subject-matter information used is furnished by the animal husbandry specialists. They also assist in selection and judging of animals.

BEEF-CATTLE FEEDING.-- Demonstrations were carried out by 72 cooperators in 14 counties. County tours were conducted at the close of the feeding period for the studying of results.

FEEDER-CATTLE EXHIBIT.-- In cooperation with Chicago Livestock Exchange an exhibit was put on at the State fair. There were shown 17 grades of feeder cattle, made up of 4 lots of 2 year-old steers, 4 lots of yearling steers, 3 lots of feeder cows, 3 lots of feeder heifers and 3 of feeder calves. In each lot 4 of the cattle were in feeder condition and one animal represented that particular grade of feeder when finished ready for slaughter. Values were posted on the fat animals. This was an effective piece of work and met with hearty approval.

STOMACH-WORM CONTROL.-- One hundred and fifteen drenching demonstrations attended by an average of 38 farmers were held in 19 counties.

SHEEP EXHIBITS.-- An educational sheep exhibit was prepared and shown at 11 county fairs in the central and eastern parts of the state. The market grades of sheep and lambs as well as of wool, the need for stomach-worm control and the value of good breeding were among the points featured by live animals, charts, etc.

JUDGES' TRAINING SCHOOL.-- At the University a school for the training of county fair judges was held. One day was devoted to sheep and another to dairy cattle. The total number present was 170. Last year beef cattle and hogs were similarly handled.

OKLAHOMA

JUNIOR CLUBS.-- A total of 131 beef calves, 393 fat barrows and 73 lambs was exhibited at the Southwest American Livestock Show at Oklahoma City by club members. Thirteen counties were represented in the ownership of calves.

JUDGING SCHOOLS.-- Thirty livestock judging schools with a total attendence of 690 boys and girls were held during the year. The judging team sent to Chicago to compete at the International Livestock Exposition won first as a team in individual honors. The same team won the same honors at the American Royal at Kansas City. All three members plan to enter the Oklahoma A. & M. College for the agricultural course.

FARM FLOCKS.-- Reports were received on 202 completed sheep demonstrations during the year that involved 4510 animals in 18 counties. The average net profit per head ranged from $2.36 in flocks of 200 or more, to $12.00 per head in flocks of 50 or less.

BEEF CATTLE.-- Seventeen beef-cattle demonstrations were completed during the year, involving 2,663 animals. The average net profit per head was $6.64. Calves which weighed from 800 to 1,000 pounds at from 12 to 18 months of age were the most profitable.

OREGON

GENERAL.-- The three projects that have been the most successful during the year are: Wool improvement (which may be called ewe culling) cost of production, and castration and docking of lambs. The wool-improvement work is a five-year undertaking, three years of which have been completed. The important factors in the promotion of this project are as follows: A limited number of demonstrators and a selection of counties so situated as to represent conditions in all sections of the State. The county agent and specialist carefully select the demonstrators who must have representative bands of sheep and be enthusiastic in regard to the work. The demonstrator is required to agree to the use of his sheep for a period of 5 years, to cull out the light-shearing ewes each fall, and to use heavy-shearing rams. Both agent and specialist are present at shearing time to weigh all fleeces and brand the sheep. The data are carefully studied by the agent and specialist and reports prepared in chart and press-service form for use at meetings and through newspapers of the State.

MEAT EXHIBIT.-- An educational exhibit based on quality in meats was prepared in cooperation with the Pacific International Livestock Exposition and other agencies for the Portland show. The plan devised was the construction of a glass-sided cooler 8x20 feet for the exhibition of the meat in the center of the space. In one side of this refrigerator was shown a fore - and a hind - quarter of beef from each of the four grades of steer beef, prime, good, common, and inferior, together with the retail cuts from the other half of each carcass. In the other side of the cooler, in a similar manner, the same grades of cow beef, were displayed. Just across the aisles, opposite each grade of beef, were exhibited like animals corresponding in grade to that beef directly back of them.

The prevailing market-prices of the live cattle, of the wholesale cuts and retail prices to the consumer were shown for each grade and class.

The beef was cut and displayed in such a mammer as to allow an easy comparison of marbling, color, and distribution of fat, conformation, proportion of meat to bone and other factors responsible for the grades.

Demonstrators were present at all times to explain the exhibit and to answer questions. Sample sandwiches were served at certain times by 4-H girls which added to the interest.

The exhibit was a splendid success and was visited and favorably commented on by thousands of show visitors.

CASTRATION AND DOCKING. -- Demonstrations were conducted in 7 counties, the project having been promoted for the past five years. When it was started 75 per cent of the lambs coming to the Portland market were not docked and castrated; the percentage has now been reduced to 25 per cent.

PENNSYLVANIA

PIG CLUBS. -- Membership in pig clubs increased from 202 in 1924 to 379 in 1925. In one outstanding club 5 to 20 members had pigs which exceeded the goal for daily gains of 1.25 pounds per day for slaughter stock and all feed records were reported. This club has been in operation for 5 consecutive years.

BABY-BEEF CLUBS. -- Baby - beef clubs numbering 4 with 53 members in 1924, increased to 9 with a membership of 117 in 1925. They were distributed over 7 counties. One bull calf reached the goal of 1000 pounds or more at 12 months of age. He weighed 1,137 pounds.

TON-GELDING CLUB. -- The initial ton-gelding club in Jefferson County had a record year and has proved an excellent demonstration. A second club has been organized.

HORSE AND MULE PULLING DEMONSTRATIONS. -- Approximately 75,000 people from 12 counties witnessed such demonstrations which were presented by use of the dynamometer.

RAM ASSOCIATIONS. -- Three were organized this year, making a total of 18 now existing in 9 counties.

SHEEP MANAGEMENT. -- A total of 96 shearing, docking and drenching demonstrations were held with an attendance of 575 raisers.

BOAR ASSOCIATIONS. -- Twelve new boar associations were formed this year, making a total of 106 in the State, and having a membership of 1,287 farmers in 39 counties.

SOUTH CAROLINA

SHEEP. -- During 1925, sheep in South Carolina have increased in numbers about one-third. Forty-five purebred Hampshire and Southdown rams were placed in

flocks before the 1925 breeding season. Thirty of these rams and 14 purebred ewes were purchased outside the State. About 600 lambs were docked and castrated in demonstrations. Much of the wool produced is sent to the Chatham Manufacturing Company at Elkin, North Carolina, where it is made into blankets. The growers realized about 50 cents a pound from the wool so marketed.

SOUTH DAKOTA

SWINE. -- Reports from 16 cooperators in the swine-management project indicated that a total of 1,719 pigs were matured from 236 sows or 7.25 per cent per sow. This was an average increase of 3.4 pigs per sow over the 1924 record of 4 of these men who reported the previous year's experience. Brood-sow-selection demonstrations numbering 26 were held with an attendance of 661. Feeding demonstrations involving about 65,000 hogs were carried to completion. Eight swine-club tours with an attendance of 107 people were conducted.

Eighteen pig-club meetings with a total attendance of 294 members and visitors were held. Ten demonstrations were given before about 500 pig-club members. Following is a summary of the work:

	Agent counties	Nonagent counties	Total
Clubs organized	98	14	112
Members	900	115	1,015
Number completing	511	57	568

BEEF CATTLE. -- Result demonstrations to the number of 133, involving 1,734 animals, were conducted; 28 feeding demonstrations with 776 cattle were included. In eight counties where the better sires project is carried on 85 purebred beef bulls were placed, and 121 beef bulls were placed in 15 other counties. Market-types and grades-of-beef cattle talks were given at 31 meetings attended by 5,578 people.

BABY-BEEF-CLUBS. -- There were enrolled 133 baby-beef-club members, of which 63 completed the project.

SHEEP. -- Eighty-seven sheep-club members were enrolled in 14 clubs, 48 of whom completed the work.

TENNESSEE

FINISHING BEEF CATTLE ON PASTURE. -- Nine demonstrations in six counties involving 271 cattle were carried. One of these demonstrations was conducted with heavy cattle on a farm where a part of the drove was grazed through the summer without supplement and marketed when frost came. The rest of the herd was started on grain April 10. Both lots had been wintered so as to have gained an average of 65 pounds per head. The fed lot was carried on the pasture and grain for 90 days during which period they gained 244 pounds per head at a cost of $20.68 and were sold at a farm price of $10.29 per cwt. which netted a profit of $26.44 per steer. Ten days later the other lot was sold for October delivery at $7.75 per cwt. When shipped they had gained 290 pounds per head and netted a profit of $6.75 per head.

BABY-BEEF-PRODUCTION. -- Complete records on one demonstration involving 16 calves are available. The calves were produced on the farm from which they were marketed as slaughter animals. At the beginning of the feeding period there was a charge of $24.36 per head against them. When weaned they averaged 443 pounds and were fed 135 days during which they gained 222 pounds. The cost of the finish was $13.53 per cwt. They sold for $9.50 per cwt. on a local market and netted the feeder $8.77 per head.

MARKET GRADES AND MARKETING. -- Feed-lot and pasture demonstrations, at which the subject of market grades was presented by using the available cattle, were held in different parts of the State. They were very popular and will be continued as the occasion permits. The choice of central markets and the problem of whether local or consignment selling is preferable were matters which had some attention during the year.

FEED-LOT MEETINGS AND TOURS. -- Sixteen meetings with an average attendance of 26 farmers were held. Six county tours were conducted with an attendance of from 7 to 50 farmers. Market representatives from 3 central markets participated.

BETTER-BULLS. -- Thirty purebred bulls were placed through local auction sales and 44 purebred females were sold to farmers in like manner.

DOCKING AND CASTRATING LAMBS. -- As a result of an intensified campaign of meetings and demonstrations in the chief spring-lamb counties of the State, 1,700 producers were induced to dock and castrate their lambs, which numbered approximately 50,000 head.

In Maury County 2,338 trimmed lambs averaged 73.1 pounds per head while 346 untrimmed lambs averaged 71.9 pounds. In Sumner County the average increase in weight for the trimmed lambs was 1.5 pounds per head on the top grades.

Reports on dressing percentages received from Chicago and Jersey City markets on 27,820 Tennessee lambs that graded as "tops" showed an increased yield of 2.4 per cent for the trimmed lambs.

The average per cent of lambs grading as "seconds" among the trimmed lots from 22 counties was 16.1 while in the untrimmed lots it was 31.1 per cent. Sixty-seven per cent of all "seconds" were buck lambs.

SUPPLEMENTAL FEEDING. -- In Lincoln County 252 trimmed lambs that received grain averaged 7.9 pounds more per head at marketing time than 142 lambs that had been trimmed but received no grain. In Sumner County 2,618 trimmed grain-fed lambs outweighed the untrimmed lambs receiving no grain by 9.5 pounds per head.

TON-LITTERS. -- The most practical result demonstrated by this work was the small amount of feed taken to produce 100 pounds of pork. When the usual figure of 560 pounds of corn to produce 100 pounds of pork is taken as comparison, the ton-litters work showed a saving of more than 200 pounds of grain for each 100 pounds of gain. Most of the ton-litter demonstrations were farmers who owned but one or two brood sows, but the feeding system was used by many larger hog raisers with part or all of their spring litters.

The results of this work have been widely utilized through publicity and exhibits channels. The newspapers of the State have been eager to carry local stories of human interest. Thirty ton-litters were shown at the State fair, 10 at the Knoxville Fair, 7 at the Chattanooga Fair, and from 1 to 7 at various local fairs.

VIRGINIA

GENERAL. -- The recommendations adopted by the State-wide committee, which worked out a 5 year program of agriculture extension work, was the basis of activity during the year.

PUREBRED BEEF-CATTLE SALES. -- Assistance was given to 4 auction sales in which a total of 100 head of purebreds were sold to Virginia farmers.

BETTER RAMS. -- Four public sales were conducted during the year. A total of 135 rams, many of which were from outside the State, were sold at an average price of $44.14 per head, and 18 registered ewes were also sold in one of the sales at an average price of $37.67 per head.

STOMACH-WORM CONTROL. -- In the sheep areas 74 copper-sulphate drenching demonstrations were held in which 2,982 sheep were treated. A total of 39,684 sheep were treated for internal parasites, which represents over 10 per cent of the sheep of the State.

DOCKING AND CASTRATION. -- A total of 106 demonstrations were conducted in which 4,204 lambs were trimmed. The records show that a total of 42,308 lambs were docked and castrated during the year. The increased price received for the trimmed lambs ranged from $.50 per hundred weight, early in the season, to $1.50 later.

TON-LITTERS. -- The heaviest litter was produced at a feed cost of 7.6 cents per pound and all qualifying litters showed a profit. The sow that produced the winning litter in 1924 raised a ton-litter, as did one of her daughters.

ROUNDWORM TREATMENT AND CONTROL. -- Treatment was continued in 4 counties where it was started last year and taken up in one additional county. Four demonstrations of the McLean County system of swine sanitation were conducted.

PIG CLUBS. -- A total of 162 pigs were shown by club members at the State Fair, of which 85 were entered by contestants in the 5 pig-pen contests. Five demonstration teams were trained.

BETTER SIRES. -- This project is carried as a county agent's contest, the agent obtaining the greatest number of points for replacement of scrub sows by purebreds being awarded a free trip to the International Llve Stock Exposition. Bull replacements count 10 points, rams 5 points, and boars 4 points each. Nine agents competing reported total replacements of 71 bull, 64 rams, and 21 boars.

WASHINGTON

SHEEP WORK. -- The principal results of the extension sheep program were as follows: 95 purebred rams placed; 20 judging demonstrations - attendance 371; 18 purebred Hampshire flocks totalimg over 450 breeding ewes established in Kittitas County (5 years progress.); 1 sire booth at the Kittitas County Fair; 171 sheep club members enrolled; "Per cent of Lambs Saved" survey covering 79,000 range ewes; 30 feeding and management meetings held - attendance 671; 8 flock culling demonstrations in 5 counties; 1 community concrete sheep-dipping vat installation with demonstration with 8 farm flocks containing 874 sheep dipped; 8 docking and castrating demonstrations, in five counties; 3 fitting-for-show demonstrations held;

1 purebred Pampshire sheep tour; 2 other county sheep tours held; 1 set of lantern slides of flock culling prepared; cooperative wool-marketing meetings held in 9 counties; 1 purebred ram sale at Ellensberg; 13 sheep articles written; 156 farmers adopting improved practices.

BEEF CATTLE GRADING. -- Four demonstrations were held in three counties in co-operation with James K. Wallace of the U. S. Bureau of Agricultural Economics. The attendance averaged 34 to 200.

JUNIOR CLUBS. -- The goals and enrollments in this work were as follows:

	Sheep	Swine	Beef	Colts
Goals	175	337	32	25
Enrollments	172	236	41	27

123 pigs, 17 sheep, 5 steers and 5 colts were exhibited by members at the State Club show at Yakima.

FARM FLOCKS. -- In 1920 a purebred Hampshire sheep project was initiated in Kittitas County starting with four flocks totaling about 45 ewes.It has grown to 18 flocks with over 450 head of purebred ewes. The purpose is to provide high-class range and farm-flock rams for the breeders of the State. It has been very successful.

WEST VIRGINIA

COOPERATIVE LIVESTOCK MARKETING. -- The following table compares the work of the West Virginia Cooperative Livestock Shippers' Association for the years 1924 and 1925:

Year	Shippers	Cattle shipped	Lambs shipped	Calves shipped	Gross value	Net to producers
1925	2,618	5,819	15,602	1.123	$501,587.96	$460,427.03
1924	1,874	5,201	13,034	660	464,974.98	420,501.23
Increase	744	618	2568	463	$ 36,612.98	$ 39,925.80

SHEEP. -- Eighty-seven purebred sheep, purchased outside the State, were placed in West Virginia flocks during the year and 137 purebred rams placed from within the State. Two hundred and two members of junior sheep clubs are enrolled in the 4-H project.

LIVESTOCK TOUR. -- A 7 day tour was made by 140 persons in 40 automobiles visiting livestock demonstrations and other points of interest.

STATE CLUB SHOW. -- At this show 40 ewes and lambs owned by 30 boys and girls were exhibited 25 members showed beef calves, and 12 pigs were also shown. Twenty members showed fleeces of wool and 65 members spent the entire week at the show and participated in the programs.

SWINE. -- Fifty-seven purebred boars were placed among hog raisers.

WISCONSIN

HIGH SCHOOL JUDGING CONTESTS. -- At the State contest at Madison 189 boys representing 63 schools competed.

JUNIOR LIVESTOCK SHOW. -- More than 80 boys and girls exhibited their own livestock which totaled 95 baby beeves, 90 lambs and 35 pigs in the State contest at Madison.

SHEEP. -- Six special sheep meetings and demonstrations attended by 188 farmers and 65 farm visits to sheepmen were a part of the sheep program for the year. Problems of production and marketing were discussed in detail.

HOG FEEDING DEMONSTRATIONS. -- Numerous demonstrations have been conducted with the purpose of showing how Wisconsin farmers may utilize available feeds to the best advantages in pork production.

TON-LITTERS. -- Twenty - seven litters competing in the ton-litter contests were exhibited at 12 county fairs.

Chester Manthei, a junior club member of Rock County, has raised the third ton-litter from the same sow in three years.

HAIRLESSNESS IN NEW-BORN PIGS. -- In 1923 a farmer in Washburn County had 36 sows which farrowed an average of 7 pigs per litter, all of which were hairless. This condition was attributed to a lack of iodine, and the owner conducted a demonstration in feeding iodine to 35 sows the next year as a preventative. It was given in the form of potassium iodine, one ounce to a gallon of water, of which solution one tablespoon daily was given to each sow with the feed throuhgout the gestation period. The results were an average of 6½ normal, strong pigs farrowed by each sow.

FARMERS' INSTITUTES. -- Lectures were given at 28 farmers' institutes during January and February.

WYOMING

GENERAL. -- Best results in teaching subject matter have been accomplished through simple and practical demonstrations before medium - sized groups of interested farmers. Fairs and tours are also useful because on such occasions it is possible to make comparisons that are helpful. The personal visit is also important, especially where the specialist has the confidence of the farmer or rancher. The lecture method is also good if illustrative material is available and printed information is passed out for home consumption. Moving Pictures can be used to advantage, if the subject-matter applies. The film strip is now used instead of the old style glass lantern slides.

FARM FLOCKS. -- The farm-flock idea has become very popular in many sections of the State. Broken-mouthed ewes have been utilized in many cases. The records show that 151 farm flocks were started in 5 different counties.

CATTLE GRADING. -- In cooperation with James K. Wallace of the U. S. Department of Agriculture, 8 grading demonstrations attended by 192 ranchers were held in 4 counties. The specialist now feels compentent to contunue this work without outside help.

DIRECT MARKETING. -- In Sheridan County the Farm Bureau sponsored the direct marketing of feeder steers. As a result 35 carloads of cattle were sold to feeders farther east.

JUNIOR CLUBS. -- The status of the boys and girls club work with livestock is shown below:

	No. Clubs.	No. Members	No. Animals
Sheep	5	43	66
Pig	9	68	319
Baby beef	1	3	3

FEEDING. -- In Converse County a campaign to encourage the fattening of livestock for market was conducted. Alfalfa hay and beet tops were already available and a "Grow More Barley" drive resulted in 100,000 bushels of this grain being grown. As a result of this project 12,000 lambs and 300 cattle are being finished.

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